

by



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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/779,432	02/13/2004	Richard Lau	APP 1516	8760

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EXAMINER

GESESSE, TILAHUN

ART UNIT	PAPER NUMBER
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2684

DATE MAILED: 10/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

10/779,432

**Applicant(s)**

LAU ET AL.

**Examiner**

Tilahun B. Gesesse

**Art Unit**

2684

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 13 February 2004.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-5 and 7-20 is/are rejected.
- 7) ☐ Claim(s) 6 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

**DETAILED ACTION**

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-5,7-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Svedberg et al US patent No. 5,408,218" Svedberg".

Claim 1. Svedberg teaches a telecommunications network represented by a service model dependency graph having a plurality of components in a set of nested levels indicating upstream and downstream components, (see column 7, lines 49-68 and figure 4) comprising:

Svedberg teaches receiving one alerts (22 or 23) for a component (17,20,19), generating a handle for each received alert wherein said handle includes information about the alert (column 7, lines 49-68 and figures 4-7) generating a component status indicator for the component based on a set of pre-defined rules which rules utilize the component status indicators of downstream components and information from the handles generated from alerts received at the component, (see column 8, lines 16-31 and figure 12, column8, line 54-column 10, line 52) and, associating the results of the rule evaluation, the handles used by the rule evaluation and the component status indicators of the downstream components with the component status indicator for the

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component (see column 8, lines 16-31 and figures 4 and 12, column 8, line 54-column 10, line 52).

Claim 2. Svedberg teaches the step of associating with the component status indicator the path each handle has taken through the service model dependency graph (see figure 4-7).

Claim 3. **Svedberg teaches** the handle includes information about the type of alert the time of the alert and the duration of the alert (see column 8, lines 16-31).

Claim 4 Svedberg teaches generating a service impact index at the top level of the service model dependency graph wherein the service impact index is an indicator of the impact of downstream alerts on the quality of service (see figures 4-7).

Claim 5, **Svedberg teaches** generating a total impact index by summing the service impact indexes for a plurality of services (column 12, line 41-column 13, line 28 and figure 9).

Claim 7. Svedberg teaches performing root cause analysis for a service-impacting component status indicator (see column 8 line 54-column 10 line 28).

Claim 8. **Svedberg teaches** performing root cause analysis for a service impacting component status indicator [column 8 line 54-column 10 line 28] comprises the steps of:

**Svedberg teaches** retrieving the path the service-affecting handle or handles have taken through the service model dependency graph; at each component through which the service affecting handles or handles have taken retrieving the information

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associated with the component status indicator and the associated handles for the component (column 8 line 54-column 10 line 28).

Claim 9. **Svedberg teaches** the step of prioritizing the impact of the alerts based on the service impact index see figures 4-7).

Claim 10. Svedberg teaches the step of prioritizing the impact of the alerts based on the total impact index see figures 4-7).

Claim 11. **Svedberg teaches** generating a component status indicator for one or more components is performed in the central office housing the component [column 2, line 30-column 3, lines 32].

Claims 12-13 **Svedberg teaches** generating component status indicators are performed in a central network operations center [column 5, lines 1-43].

Claim 14. **Svedberg inherently teaches** storing alerts that are not service affecting in an alert inventory (see figure 12).

Claim 15 **Svedberg teaches** a system for the handling of alerts in a telecommunications network (see figure 4-7), wherein the network is modeled as a service model dependency graph having a plurality of components in a set of upstream and downstream levels (column 5, line 1-column 8 line 53), comprising: a means for receiving alerts at a component of the network (see figures 4-7) a means for generating a handle in response to each alert wherein the handle provides information about the alert, a rule engine which utilizes the component status indicator of one or more downstream components and the handles generated in response to alerts to generate a component status indicator for each component (column 8, lines 54-column 10 line 53

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and figures 4-7), and, a means for associating the results of the rule evaluation, the handles used by the rule evaluation and the component status indicators of the downstream components with the component status indicator for each component (column 8, lines 54-column 10 line 53).

Claim 16 **Svedberg teaches** the rule engine resides at the component (column 8, lines 54-column 10 line 53).

Claim 17 **Svedberg teaches** a network operations center in communication with each component and wherein the rule engine performs the rule evaluation to generate the component status indicator for each component (column 8, lines 54-column 10 line 53).

Claim 18 **Svedberg teaches** the network operations center further comprises a means for using the alert information in the handles to perform root cause analysis (column 8, lines 54-column 10 line 53).

Claims 19-20, **Svedberg teaches** the network operations center further comprises a means for generating a service impact index indicative of the quality of service impact of alerts that reach the top level of the service model dependency graph (column 10, lines 54-57).

### ***Allowable Subject Matter***

3. Claim 6 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The prior art does not teach the total impact index is calculated by summing the service impact index for each service multiplied by a predetermined weighting factor.

### ***Conclusion***

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

Glitho et al US patent No 6,233,449 teaches an operation and maintenance control point operates at an intermediate level in a telecommunications network between the network elements and the network management to reduce the processing load on the NMS (see abstract).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tilahun B Gesesse whose telephone number is 571-272-7879. The examiner can normally be reached on flex.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nay Maung can be reached on 571-272-7882.

The Central FAX Number will change to 571-273-8300. This new Central FAX Number is the result of relocating the Central FAX server to the Office's Alexandria, Virginia campus.

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10/14/05  
TILAHUN GESESSE  
PRIMARY EXAMINER